Utah Base Maps: The Basic GIS Layer Data Ingredients

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This datasets listed below are the primary datasets AGRC uses to make the statewide streets, hybrid, imagery, and terrain-themed, statewide base map tile caches hosted at AGRC
- Preview AGRC base map tile cache services: in a Browser
- Use AGRC base map tile cache services: for Web Developers, for ArcMap Users

Most of these datasets have associated FGDC metadata. However, where necessary, notes are provided explaining what the dataset is where the name isn't self-explanatory, and how it might be best used (queries for subsets, multi-scale hints, etc) for base maps and web services.

If you see anything in our base maps that you do not think is covered in the list below, email bgranberg@utah.gov or zbeck@utah.gov and we'll be happy to provide more information to you and update this page.

Imagery Datasets (served from ImageServer but also available in file-based formats):
- AerialPhotography_Color --> HRO2009 - 1 foot or better color imagery, leaf-off conditions
- AerialPhotography_Color --> HRO2006 - 1 foot or better color imagery, leaf-off conditions, larger footprint than the 2009
- AerialPhotography_Color --> NAIP2009 - statewide 1 meter color imagery leaf-on conditions.

Terrain Datasets (served from ImageServer):
- Elevation --> Hillshade_10Meter4way
- USGS Topographic Maps (ia Image Server and also downloadable as files)

Vector Datasets (access via ArcSDE database connection or download files):
- SGID93_BOUNDARIES_Municipalities - Formally incorporated city boundaries
- SGID93_BOUNDARIES_ZipCodes - 5 digit 'area' type zip codes
- SGID93_BOUNDARIES_Wilderness_BLMWSAs - BLM wilderness study areas

- SGID93_CADASTRE_LandOwnership - this excellent dataset, maintained by State Trustlands (SITLA) in partnership with the BLM has public and private land ownership with three key attributes (property owning AGENCY, ADMIN-istrator of land, and formal DESIG-nation status). These attribute can be used to display National Parks, National Monuments, National Recreation Areas, State Parks, Wildlife Refuges, USFS Wilderness Areas, Tribal Lands, USFS, National Forests, BLM Lands, BLM designated Wilderness and Primitive Areas. The LABEL_FEDERAL and LABEL_STATE fields contain the place names of features.
SGID93_CADASTRE_PLSSSections_GCDB - Public Land Survey System's Township and Range as well as Section numbers. Good reference for rural areas where there is not much else to put on the map.

- SGID93_LOCATION_Cemeteries
- SGID93_LOCATION_EMSFacilities - Hospitals, Clinics, etc.
- SGID93_LOCATION_FireStations
- SGID93_LOCATION_Libraries
- SGID93_LOCATION_PlaceNamesGNIS2000 - Useful for mountain summits and other physical landform point features (arches, passes, etc)
- SGID93_LOCATION_PlacesOfWorship
- SGID93_LOCATION_PoliceStations
- SGID93_LOCATION_Schools - public and private schools registered with State Office of Education
- SGID93_LOCATION_ZipCodePOBoxes - delivery point zip code locations, important component of a complex address locator
- SGID93_Location_UDOTMap_CityLocations - point dataset of both incorporated and unincorporated cities, town, placenames and junctions as shown on the UDOT state highway map.

- SGID93_RECREATION_GolfCourses
- SGID93_RECREATION_ParksLocal - greenspace that is not a state and national parks
- SGID93_RECREATION_SkiLifts
- SGID93_RECREATION_UrbanTrails - this dataset is far from complete

- SGID93_TRANSPORTATION_Airports
- SGID93_TRANSPORTATION_BusRoutes_UTA (UTA is Utah Transit Authority...Wasatch Front transit)
- SGID93_TRANSPORTATION_BusStops_UTA
- SGID93_TRANSPORTATION_CommuterRailRoute_UTA
- SGID93_TRANSPORTATION_CommuterRailStops_UTA
- SGID93_TRANSPORTATION_LightRailStations_UTA
- SGID93_TRANSPORTATION_LightRail_UTA
- SGID93_TRANSPORTATION_PortsOfEntry
- SGID93_TRANSPORTATION_Railroads - TYPE and ISCOMMUTER fields are key for differentiating frieght rail from light rail and commuter rail lines duplicated in specific datasets also included. Also, COARSE = 1 is great for drawing a single track feature at coarser scales where double tracks and rail yards would clutter things up
- SGID93_TRANSPORTATION_RoadsShieldLines - we use this dataset to dynamic placement of interstate (SHIELD = 1), us highway (2) and state highway (3) shields so they look good cartographically...rnders the minimum shield set that provides a clear picture of what all the roads are.
- SGID93_TRANSPORTATION_Roads_FreewayExits - Exit number and signage text can be parsed out of EXITNAME
- SGID93_TRANSPORTATION_Roads - Statewide roads dataset (tips on using this layer cartographically). The roads layer will soon to be in a new more consumable schema being worked on by UGIC Standards Committee (details on AGRC proposal for new schema). The dataset currently has a 95% statewide geocoding match rate against zip code and it is also possible to match against address system although that is more complicated.
- SGID93_TRANSPORTATION_UDOTMileposts_Approx - Milepost locations...be sure to ignore the N direction mileposts but just for the 5 interstates (I-15, I-70, I80,I-84, I-215)...derived from UDOT linear referencing data.
- SGID93_TRANSPORTATION_UDOTRoutes_LRS - UDOT linear referencing data (polylineM) for all state and federal highways, including ramps and collectors. CARTO code is useful and described in metadata. This dataset is derived from the attributes in SGID93_TRANSPORTATION_Roads so you can probably ignore it unless you want polylineZ

- SGID93_WATER_LakesNHDHighRes - Key attributes are INUTAH (1 shows streams clipped to Utah boundaries, ISMAJOR (1 selects a subset to be shown at coarser scales), and SUBMERGED (be sure to ignore everything = 1 as it is a hydrology network feature used to connect streams across water bodies)...GNIS_NAME has feature name.
- SGID93_WATER_SpringsNHDHighRes
- SGID93_WATER_StreamsNHDHighRes - Key attributes are INUTAH (1 shows lakes clipped to Utah, ISMAJOR (1 selects a subset to be shown at coarser scales)...GNIS_NAME has feature name
- SGID93_WATER_Wetlands - The metadata documents different classes of wetland features, the right subset can be a nice cartographic detail showing riparian areas, etc.